

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1-26. (Canceled)

27. (Currently Amended) A connector, comprising:

a first connector member comprising an outer housing and a first externally-threaded female luer ~~threaded~~ member coaxially disposed in and recessed within the outer housing and separated therefrom by an annular cavity; and

a second connector member comprising a male luer disposed in and recessed within an internally-threaded second ~~threaded~~ member, the internally-threaded second member comprising at least one circumferentially-extending raised structure on an external surface thereof, the at least one raised structure extending into a liquid-trapping chamber defined by an inner wall of the outer housing and the first externally-threaded female luer member and further defining a tortuous path with the inner wall of the outer housing for inhibiting liquid flow from the liquid-trapping chamber between the outer housing and the internally-threaded second member when the first connector member is connected to the second connector member;

wherein the first externally-threaded female luer ~~threaded~~ member and the internally-threaded second ~~threaded~~ member cooperate to securely and releasably connect the first connector member to the second connector member, and wherein the internally-threaded second ~~threaded~~ member is received in the outer housing of the first connector member when the first connector member is connected to the second connector member.

28-39. (Canceled)

40. (Previously Presented) The connector of claim 27, further comprising a protective cap associated with at least one of the first connector member and the second connector member.

41. (Previously Presented) The connector of claim 40, wherein the first and second connector members each comprise a raised rib adapted to cooperate with a corresponding groove defined internally in the protective cap.

42. (Currently Amended) A fluid path set for use in a fluid delivery system, comprising:

a first section;

a second section adapted for removable fluid communication with the first section; and

a connector providing the removable fluid communication between the first section and the second section, the connector comprising:

a first connector member associated with one of the first section and the second section and comprising an outer housing and a first externally-threaded female luer ~~threaded~~ member coaxially disposed in and recessed within the outer housing and separated therefrom by an annular cavity; and

a second connector member associated with the other of the first section and the second section and comprising a male luer disposed in and recessed within an internally-threaded second ~~threaded~~ member, the internally-threaded second member comprising at least one circumferentially-extending raised structure on an external surface thereof, the at least one raised structure extending into a liquid-trapping chamber defined by an inner wall of the outer housing and the first externally-threaded female luer member and further defining a tortuous path with the inner wall of the outer housing for inhibiting liquid flow from the liquid-trapping chamber between the outer housing and the internally-threaded second member when the first connector member is connected to the second connector member;

wherein the first externally-threaded female luer ~~threaded~~ member and the internally-threaded second ~~threaded~~ member cooperate to securely and releasably connect the first connector member to the second connector member to establish the removable fluid communication between the first section and the second section, and wherein the internally-threaded second ~~threaded~~ member is received in the outer housing of the first connector member when the first connector member is connected to the second connector member.

43-54. (Canceled)

55. (Previously Presented) The fluid path set of claim 42, further comprising a protective cap associated with at least one of the first connector member and the second connector member.

56. (Previously Presented) The fluid path set of claim 55, wherein the first and second connector members each comprise a raised rib adapted to cooperate with a corresponding groove defined internally in the protective cap.

57. (Previously Presented) The fluid path set of claim 42, wherein the first section is adapted for connection to a pressuring device and to a source of fluid to be loaded into the pressurizing device, and wherein the first section comprises an intervening drip chamber between the fluid source and the pressurizing device.

58. (Previously Presented) The fluid path set of claim 57, wherein the drip chamber comprises a projection.

59. (Previously Presented) The fluid path set of claim 42, wherein the second section comprises a pressure isolation mechanism, comprising a lumen, a pressure isolation port, and a valve member comprising a biasing portion biasing the valve member to a normally open position permitting fluid communication between the lumen and the pressure isolation port, the valve member movable to a closed position when fluid pressure in the lumen reaches a predetermined pressure level sufficient to overcome the biasing force of the biasing portion of the valve member.

60. (Currently Amended) An injector system comprising:
a source of injection fluid;
a pump device;

a fluid path set disposed between the source of injection fluid and the pump device, and comprising a first section adapted for connection to the source of injection fluid and a second section adapted for removable fluid communication with the first section; and

at least one connector providing the removable fluid communication between the first section and the second section, the connector comprising:

a first connector member associated with one of the first section and the second section and comprising an outer housing and a first externally-threaded female luer ~~threaded~~ member coaxially disposed in and recessed within the outer housing and separated therefrom by an annular cavity; and

a second connector member associated with the other of the first section and the second section and comprising a male luer disposed in and recessed within an internally-threaded second ~~threaded~~ member, the internally-threaded second member comprising at least one circumferentially-extending raised structure on an external surface thereof, the at least one raised structure extending into a liquid-trapping chamber defined by an inner wall of the outer housing and the first externally-threaded female luer member and further defining a tortuous path with the inner wall of the outer housing for inhibiting liquid flow from the liquid-trapping chamber between the outer housing and the internally-threaded second member when the first connector member is connected to the second connector member;

wherein the first externally-threaded female luer ~~threaded~~ member and the internally-threaded second ~~threaded~~ member cooperate to securely and releasably connect the first connector member to the second connector member to establish the removable fluid communication between the first section and the second section, and wherein the internally-threaded second ~~threaded~~ member is received in the outer housing of the first connector member when the first connector member is connected to the second connector member.

61-69. (Canceled)

70. (Original) The injector system of claim 60, further comprising a protective cap associated with at least one of the first connector member and the second connector member.

71. (Original) The injector system of claim 70, wherein the first and second connector members each comprise a raised rib adapted to cooperate with a corresponding groove defined internally in the protective cap.

72. (Original) The injector system of claim 60, wherein the first section is adapted for connection to a pressurizing device and to the source of injection fluid to be loaded into the pressurizing device, and wherein the first section comprises an intervening drip chamber between the source of injection fluid and the pressurizing device.

73. (Original) The injector system of claim 72, wherein the drip chamber comprises a projection.

74. (Original) The injector system of claim 60, wherein the second section comprises a pressure isolation mechanism, comprising a lumen, a pressure isolation port, and a valve member comprising a biasing portion biasing the valve member to a normally open position permitting fluid communication between the lumen and the pressure isolation port, the valve member movable to a closed position when fluid pressure in the lumen reaches a predetermined pressure level sufficient to overcome the biasing force of the biasing portion of the valve member.

75. (Original) The injector system of claim 60, wherein the first and second connector members comprise wings for grasping by a user while connecting the first and second connector members.